VPDES PERMIT PROGRAM FACT SHEET - MINOR MODIFICATION

FILE NO: 728

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as an **INDUSTRIAL** minor modification. Because this is a minor modification processed in accordance with the VPDES permit regulation, 9 VAC 25-31-400, no change in limits, discharge monitoring requirements, special conditions or other changes have occurred except those specifically allowed under the regulatory description of minor modification and described in this fact sheet. Therefore, no information is provided regarding limits or special conditions rationale. There are no changes in stream impacts and no public notice information is included since it is not required. Only information pertinent to the minor modification is provided in this fact sheet which shall serve as an amendment to the fact sheet prepared at permit **reissuance** that occurred on November 14, 2012.

1. **PERMIT NO.**: VA0004103 **EXPIRATION DATE**: November 13, 2017

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

Dominion - Yorktown Power Station
1600 Waterview Road
Yorktown, VA 23692

FACILITY LOCATION ADDRESS (IF DIFFERENT)

CONTACT AT FACILITY:
NAME: Cathy C. Taylor
TITLE: Director Electric Environmental Services
PHONE: (804)273-2929
EMAIL: Cathy.C.Taylor@dom.com

CONTACT AT LOCATION ADDRESS
NAME: Laura A. Shumaker
TITLE: Environmental Compliance Coordinator
PHONE: (757)898-2555
EMAIL: Laura.A.Shumaker@dom.com

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: C.D. Holley
TITLE: V.P. Fossil & Hydro Systems Operations
COMPANY NAME: (IF DIFFERENT)
ADDRESS: 5000 Dominion Blvd.
Glenn Allen, VA 23060
PHONE:(804)273-2929

CONSULTANT CONTACT:
NAME:
FIRM NAME:

ADDRESS:

PHONE: ( )

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Tidewater Regional Office

Permit Writer(s): Melinda Woodruff Date(s): July 5, 2012, July 11, 2013
Reviewed By: Deanna Austin Date(s): July 11, 2013, 7/17/13 7/4/13 7/24/13
(TO BE REVIEWED BY THE WATER PERMITS FACILITY COORDINATOR IF THE MINOR MODIFICATION IS PROCESSED BY ANYONE OTHER THAN THE FACILITY COORDINATOR)

5. **PERMIT ACTION:**

( ) Owner Minor Modification (x) Board Minor Modification
( ) Change of Ownership/Name [Effective Date:]

6. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:**

Attachment 1	TABLE III(a) - Change Sheet
Attachment 2	Chronology Sheet
Attachment 3	Table II - Change for Outfall 008 and 014
Attachment 4	TMP - Change for Outfall 003 and 004
Attachment ____	Discharge Location/Topographic Map
Attachment ____	Schematic/Plans & Specs/Site Map/Water Balance
Attachment ____	TABLE I - Discharge/Outfall Description

MODIFICATION REQUEST COMPLETE: NA

7. **RECEIVING WATERS CLASSIFICATION**: River basin information.

Outfall No(s): 003

Receiving Stream:	Unnamed Tributary to Chisman Creek
River Mile:	see attachment 10
Basin:	Chesapeake Bay, Atlantic Ocean and Small Coastal
Subbasin:	NA
Section:	2d
Class:	III
Special Standard(s):	None
Tidal:	YES
7-Day/10-Year Low Flow:	NA
1-Day/10-Year Low Flow:	NA
30-Day/5-Year Low Flow:	NA
Harmonic Mean Flow:	NA

Outfall No(s): 008 and 014

Receiving Stream:	York River
River Mile:	see attachment 10
Basin:	York River
Subbasin:	NA
Section:	1
Class:	II
Special Standard(s):	a
Tidal:	YES
7-Day/10-Year Low Flow:	NA
1-Day/10-Year Low Flow:	NA
30-Day/5-Year Low Flow:	NA

8. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

THE MODIFICATION CONSISTS OF typographical corrections for monitoring frequency for copper and zinc at outfall 008 and 014 and corrections for TMP requirements for outfall 003. This modification addresses only these items specifically to correct errors found after the reissuance of the current permit.

9. **CHANGES TO PERMIT**: Use **TABLE III(a)** to record any changes from the previous permit and the rationale for those changes.

SEE ATTACHMENT _1_

10. **ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:**

ATTACHMENT 1

TABLE III(a) CHANGE SHEET

TABLE III(a)
VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
008 and 014	Copper and Zinc	1/Year to 1/3 Months		Typographical error	7/5/2013 MYW

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Special Condition for TMP Part 1.C	Corrected language for reproduction and not growth for Outfall 003	7/5/13 MYW

ATTACHMENT 2

CHRONOLOGY SHEET

VPDES PERMIT PROGRAM

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
NA	NA	NA	NA	NA

APPLICATION TO VDH:	VDH COMMENTS RECEIVED:
APPLICATION TO OWPS:	OWPS COMMENTS RECEIVED:
APPLICATION ADMIN. COMPLETE:	APPLICATION TECH. COMPLETE:
DATE FORWARDED TO ADMIN:	

Date	DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)
7/5/13	Board Initiated Modification for changes to Outfall 103 for monitoring frequency for Copper and Zinc from 1/Y to 1/3 months. Modification for Changes to TMP language for Outfall 003. Corrected pages are attached to transmittal letter along with new copy of the permit.
7/8/2013	Board Initiated Modification draft complete and sent out for review and signature.

ATTACHMENT 3

TABLE II - Outfall 008 and 014

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING (CONTINUED)

OUTFALL #008 and 014
Outfall Description: Regulated storm water runoff from an industrial activity area; 008 - unit 3 area, ash handling areas; 014 - service road for intake cooling water pump
SIC CODE: 4911

(x) Final Limits ( ) Interim Limits Effective Dates - From: Issuance To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	MULTIPLIER OR PRODUCTION	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS [a]	
			MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)	BPJ-14		NL	NA	NL	1/Year	Estimate [b]
pH	BPJ-14		NA	NL	NL	1/Year	Grab
Total Phosphorus (mg/l)	BPJ		2.0	NA	NA	1/Year	Grab
Total Suspended Solids (mg/l)[c]	BPJ-14		NA	NA	NL	1/Year	Grab
TPH (mg/l)[c]	BPJ		NA	NA	NL	1/Year	Grab
Dissolved Copper (ug/l) [c] [d]	BPJ		NA	NA	NL	1/3 Months	Grab
Dissolved Zinc (ug/l)[c][d]	BPJ		NA	NA	NL	1/3 Months	Grab

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY; I.S. = Immersion Stabilization
1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).
1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.D. (STORM WATER MANAGEMENT CONDITIONS) for additional storm water sampling and reporting requirements.
[b] Estimate of the total volume of the discharge during the storm event.
[c] See Parts I.B.5. and I.B.6. for quantification levels and reporting requirements, respectively.
TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.
[d] See Part I.D. for Storm Water Evaluation requirements.

The bases for the limitations codes are:

Best Professional Judgment for storm water in category of steam electric facilities (14)

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

ATTACHMENT 4

TMP

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard Virginia Beach, VA 23462

SUBJECT: TMP language for Dominion Virginia Power Yorktown Plant (VA0004103)

TO: Melinda Woodruff

FROM: Deanna Austin

DATE: 7/8/13

COPIES:

A minor permit modification was initiated to correct TMP permit language concerning the chronic test for **Ceriodaphnia dubia**. The test type was missing reproduction but contained growth. It has been corrected to include reproduction and remove growth. No other changes were made to the TMP section, therefore only the section where changes were made are included in this memo.

The following toxicity language is recommended for the reissuance of the VA Power –Yorktown permit (VA0004103).

C. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring for outfalls 002 and 004

a. In accordance with the schedule in C.2.below, the permittee shall conduct annual toxicity tests for the duration of the permit.

The permittee shall collect a grab sample of final effluent from outfall 002 in accordance with the sampling methodology in Part I.A. of this permit. The grab sample for toxicity testing shall be taken at the same time as the monitoring for the outfall in Part 1.A. of this permit. Annual acute and chronic tests shall be conducted for outfall 002 using:

48 Hour Static Acute test using **Americamysis bahia**

Chronic Static Renewal 7-day Survival and Growth Test with **Americamysis bahia**

The permittee shall collect a grab sample of final effluent from outfall 004 in accordance with the sampling methodology in Part I.A. of this permit. The grab sample for toxicity testing shall be taken at the same time as the monitoring for the outfall in Part 1.A. of this permit. An annual chronic test shall be conducted for outfall 004. The chronic test to use is:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using **Ceriodaphnia dubia**

b. The acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50}. Express the results as TU_a (Acute Toxic Units) by dividing 100/ LC_{50} for reporting.

The chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOEC's in the test report.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. In the event that sampling of any of the outfalls is not possible due to the absence of effluent flow during a particular testing period, the permittee shall perform a make-up sample during the next testing period.

d. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

e. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

(2) Chronic NOEC of 100% equivalent to a TU_c of 1.0

2. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the

schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody. **Attachment A** must be submitted with each complete report. All data shall be submitted within 60 days of the sample date.

(a)	**Conduct first annual TMP test for outfall 002 using Americamysis bahia and for outfall 004 using Ceriodaphnia dubia**	**By December 31, 2013**
(b)	**Submit results of all biological tests**	**Within 60 days of the sample date and no later than January 10, 2014**
(c)	**Conduct subsequent annual TMP tests for outfalls 002 and 004**	**By December 31, 2014, 2015, and 2016**
(d)	**Submit subsequent annual biological tests**	**Within 60 days of the sample date and no later than January 10, 2015, 2016 and 2017**

3. Biological Monitoring for Outfall 003

a. In accordance with the schedule in C.4. below, the permittee shall conduct semi-annual toxicity tests for the duration of the permit.

(1) The permittee shall collect a grab sample of final effluent for acute tests from outfall 003 in the same manner as samples collected for Part 1.A of this permit. The grab samples for toxicity testing shall be taken at the same time as the monitoring for the outfall in Part 1.A. of this permit.

(2) Chronic testing shall be required when the discharge is continuous for 8 hours or more a day for three consecutive days **OR** when the discharge occurs for four consecutive days regardless of the amount/time of discharge. The permittee shall submit monthly operational logs documenting days and times of discharge with the toxicity results.

If required, the permittee shall collect 3 grab samples over a 24 hour period for chronic tests from outfall 003 in accordance with the sampling methodology in Part I.A. of this permit.

Semi-annual acute and chronic (if required) tests shall be conducted for outfall 003 using:

48 Hour Static Acute test using **Ceriodaphnia dubia**

Chronic 3-Brood Static Renewal Survival and Reproduction Test

using **Ceriodaphnia dubia**

b. The acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50}. Express the results as TU_a (Acute Toxic Units) by dividing 100/ LC_{50} for reporting.

The chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOEC's in the test report.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. In the event that sampling of any of the outfalls is not possible due to the absence of effluent flow during a particular testing period, the permittee shall perform a make-up sample during the next testing period.

d. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

e. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

(2) Chronic NOEC of 100% equivalent to a TU_c of 1.0

4. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, all chains of custody, and the outfall 003 operational log. **Attachment A** must be submitted with each complete report. All data shall be submitted within 60 days of the sample date.

(a)	Conduct first semi-annual TMP tests for outfall 003 using Ceriodaphnia dubia	By June 30, 2013
(b)	Submit results of the biological	Within 60 days of the

	tests	sample date and no later than July 10, 2013
(c)	Conduct subsequent semi-annual TMP tests for outfalls 003 using Ceriodaphnia dubia	By December 31 and June 30 each year
(d)	Submit subsequent semi-annual biological tests	Within 60 days of the sample date and no later than January 10 and July 10 of each year